

Message

From: Jackie Bangma [Ex. 6 Personal Privacy (PP)]
Sent: 9/30/2019 2:18:03 PM
To: Strynar, Mark [Strynar.Mark@epa.gov]
Subject: Re: GenX, Hydro-EVE, and Nafion BP2

Mark,

I should've thought to measure the methyl ester. I have been checking that GenX concentration doesn't go down. I will check for the methyl ester next time I run it on the mass spec.

Zhenfa Zhang at UNC has recently been working on synthesizing solid Hydro-EVE in small batches for the PFAST collaboratory. I am away for holiday, but we were going to work on getting about 0.1 gram from him for some toxicity testing when I return. I could run some over to you if you are interested. I believe he has about a gram total at this point.

Let me know :)

Hope you had a great weekend!

-Jackie

On Mon, Sep 30, 2019 at 7:29 AM Strynar, Mark <Strynar.Mark@epa.gov> wrote:

Hi Jackie,

I store my HFPO-DA solution in methanol with 5% water with NaOH in my initial stock (generally 10,000 ng/uL). I then do a serial dilution with 100% methanol diluting both the analyte and NaOH. By doing this I have not seen any changes with time. I store mine room temp. The concern is the formation of a methyl ester due to methanol storage. If your storage has not shown any issues that is good news. The way I check it on my end is to make up new stocks and compare to old each time I checked.

The best approach is to make it up fresh any time you feel as a researcher is a critical time in your experiments to assure yourself the concentration of the analyte is accurate and not biased due to storage stability. Starting a new set of experiments, new quantitation etc.

I don't have a concern over Nafion BP2 in methanol as none of the sulfonates make methyl esters however I would have the same concern with the Hydro EVE. Speaking of Hydro EVE what is your source? Is it solid? My only source has been Chemours.

Cheers,

Mark

From: Jackie Bangma Ex. 6 Personal Privacy (PP)
Sent: Friday, September 27, 2019 1:20 PM
To: Strynar, Mark <Strynar.Mark@epa.gov>
Subject: GenX, Hydro-EVE, and Nafion BP2

Hi Mark!

After our chat at SETAC PFAS, I have been looking into the stability of our stock solutions of GenX in pure MeOH (kept in the -20C) . It looks like they are stable to 6 weeks (as far out as I have tested) which is a relief to know. It might be because our stocks are at such a high concentration (and kept in the -20 C) that we don't see a large enough change to make a nominal change after dilutions. Every so often I will test it again to make sure our stock remain stable, but I wanted to share.

We are also getting ready to start testing toxicity of Nafion BP2 and HydroEVE on placental cells, so I wanted to pick your brain on if there is anything particular we should be wary of as we begin to make the stock solutions for those two PFAS. We hope to keep them in MeOH like the others, but will do whatever is best.

Hope you are having a wonderful week!

-Jackie